Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Making a Samuri Sword

1. When did the Japanese begin making samuri swords?
2. Use diagrams or words to explain what happens at the ATOMIC LEVEL as the sword is made.
3. Define “tamahagane”
4. Compare and contrast Iron and steel.
5. Explain why is steel harder than iron.
6. Document the process of making a samuri sword – what happens in each step:

|  |  |  |  |
| --- | --- | --- | --- |
| Iron production and forging | Sword hardening and sharpening | Sword polishing and detailing | Sword testing |
|  |  |  |  |

1. How long does it take to produce a finished samuri sword (using the traditional methods shown in the video)?
2. Which part of the process takes the longest*?*
3. What characteristics of the sword set it apart from all others?
4. Identify **two** science-related things you learned by watching this video: